



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/517,354 03/02/00 YAMAZAKI

S 07977/015003

EXAMINER

MMC2/1219

SCOTT C HARRIS
FISH & RICHARDSON PC
4350 LA JOLLA VILLAGE DRIVE SUITE 500
SAN DIEGO CA 92122

PARKER, K

ART UNIT

PAPER NUMBER

2871

DATE MAILED:

12/19/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/517,354

Applicant(s)
Yamazaki et al

Examiner
Kenneth Parker

Group Art Unit
2871



☒ Responsive to communication(s) filed on Sep 19, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-27 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-27 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/611,336.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3,4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2871

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2871

2. **Claims 1-2, 4-6, 9-12, 14-16, 18-19, 21-23, 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matawari et al, U.S. Patent #5,200,847**

Matawari discloses a liquid crystal device in which glass substrates with polysilicon driver are mounted on a substrate of liquid crystal. Both active and passive are included. Lacking are the details of how the polycrystalline silicon and the devices were formed on the glass substrate, the dividing of the substrates. The details of the independent claims of forming the semiconductor layer, crystallizing the film, patterning and forming the TFTs, were the conventionally employed methods at the time, and would have been obvious for that reason. The dividing of the substrates was a conventional practice for both driving circuits and LCD displays, in that devices were made in groups and cut for the benefit of keeping manufacturing cost down, and would have been obvious for those reasons. The other details such as the layer thickness (claims 11, 14, 18, 23), the use of nickel in the recrystallization (claims 12-15), the silicon nitride passivation film (claims 16-25), and the presence of hydrogen were all of the well known techniques required for good device characteristics, and obvious for those reasons.

3. **Claims 1-2, 4-6, 8-19, 21-23, 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vu et al, U.S. Patent #6,143,582.**

Vu discloses a liquid crystal device in which glass substrates with polysilicon driver are mounted on a substrate of liquid crystal. The removal of the substrate is included. Lacking are the details of how the polycrystalline silicon and the devices were formed on the glass substrate,

Art Unit: 2871

the dividing of the substrates. These claimed of the independent claims of forming the semiconductor layer, crystallizing the film, patterning and forming the TFTs were the conventionally employed methods at the time, and would have been obvious for that reason. The dividing of the substrates was a conventional practice for both driving circuits and LCD displays, in that devices were made in groups and cut for the benefit of keeping manufacturing cost down, and would have been obvious for those reasons. The other details such as the layer thickness (claims 11, 14, 18, 23), the use of nickel in the recrystallization (claims 12-15), the silicon nitride passivation film (claims 16-25), and the presence of hydrogen were all of the well known techniques required for good device characteristics, and obvious for those reasons.

Response to Restriction

Applicant's election without traverse in paper 7 is acknowledged.

Information Disclosure Statement

The IDS of paper #4 has had the US references considered thus far because the file was not yet available to the examiner. When the file is available, if the references are in the file as indicated by applicant, they will then be considered.

Serial Number: 09/126,826

Page 5

Art Unit: 2871

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is (703) 305-6202. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

December 18, 2000



**KENNETH ALLEN PARKER
PRIMARY PATENT EXAMINER
GAU 2871**